

## Refine Search

### Search Results -

Terms	Documents
(online and (course\$ or teach\$) and (network\$ or server\$ or distributed) and database\$ and hierarch\$ and (level\$ or tier\$)).clm.	1

Database:

US Pre-Grant Publication Full-Text Database  
 US Patents Full-Text Database  
 US OCR Full-Text Database  
 EPO Abstracts Database  
 JPO Abstracts Database  
 Derwent World Patents Index  
 IBM Technical Disclosure Bulletins

Search:

L4

Refine Search

Recall Text

Clear

Interrupt

### Search History

DATE: Monday, May 10, 2004    [Printable Copy](#)    [Create Case](#)

<u>Set</u> <u>Name</u> side by side	<u>Query</u>	<u>Hit</u> <u>Count</u>	<u>Set</u> <u>Name</u> result set
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; PLUR=YES; OP=OR</i>			
<u>L4</u>	(online and (course\$ or teach\$) and (network\$ or server\$ or distributed) and database\$ and hierarch\$ and (level\$ or tier\$)).clm.	1	<u>L4</u>
<u>L3</u>	(online and (course\$ or teach\$) and (network\$ or server\$ or distributed) and database\$ and hierarch\$ and (level\$ or tier\$)).ab.	0	<u>L3</u>
<u>L2</u>	(online and (course\$ or teach\$) and (network\$ or server\$ or distributed) and database\$ and hierarch\$ and (level\$ or tier\$)).ti.	0	<u>L2</u>
<u>L1</u>	(online and (course\$ or teach\$) and (network\$ or server\$ or distributed) and database\$ and hierarch\$ and (level\$ or tier\$)).	2546	<u>L1</u>

END OF SEARCH HISTORY

First Hit**End of Result Set**

Generate Collection

Print

L4: Entry 1 of 1

File: PGPB

Apr 11, 2002

DOCUMENT-IDENTIFIER: US 20020042293 A1

TITLE: Net related interactive quiz game

## CLAIMS:

1. Apparatus for playing a quiz game of skill playable by remotely located participants simultaneously logged in and competing against each other, said game including inserted advertising comprising: a network structure for allowing multiple players to engage in a quiz game using an electrical or electronic network for data exchange; and a control system for establishing a virtual universe for said quiz game that can be accessed by any of said multiple players via an electrical or electronic network, said control system being operative for providing quiz questions and inserted advertisement for each of said multiple players; said control system including: text means for receiving a text input from each one of said multiple players, said text input being in response to the quiz question which is in the form of a multiple choice question.

4. Apparatus for playing a quiz game of skill playable by remotely located participants simultaneously logged in and competing against each other, said game including inserted advertising, comprising: (i) A participant node defined by a) display means for displaying data; b) Inputting means or pointer means such as a keyboard or a mouse; c) Data storage means d) Connectivity means to connect the participant node to an electrical or electronic network; e) Processing means adapted to--a) control the display means b) receive signals from the inputting means, process these signals and transmit these signals to an external device cooperating with the said processing means; c) receive information from an external cooperating device, process this information to data and store the data in the said data storage means; d) fetch data stored in the said data storage means for processing and/or display in the said display means; and e) alter the said data stored in the said data storage means and transfer data stored, processed, altered and/or displayed to an external cooperating device through the connectivity means; (ii) a controller means adapted to communicate with the said nodes via a bank of application servers containing at least one application server and a bank of data base servers containing at least one data base server, through an electric or electronic network for playing the game in accordance with predetermined rules of the game and set parameters and transmitting advertisements inserted between segments of the game or during a game said combination of controller means, application server means and data base means adapted: a) to transmit a question from a question data bank to be receivable by the participants simultaneously within a predetermined time interval; b) to receive responses from the participants simultaneously in a predetermined time interval; c) to process the responses received to ascertain whether a correct response has been received within the set time limit; and d) to transmit advertisements to be displayed in the display means associated with all the participant nodes.

5. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the controller means is an application server in the bank of application servers.

6. Apparatus for playing a quiz game of skill as claimed in claim 4 which the bank of application servers includes Set Game Parameter Means, which enable the Controller means to perform various functions including preset the rules and parameters for playing the game, to edit, modify, alter, delete, and add new and or otherwise change the Parameters for playing the game.
7. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a Set Parameters for Advertisement Means, which enables the Controller to set the Advertisements to be inserted in between game intervals and to edit, modify, alter, delete, and add new and or otherwise change the Parameters for Advertisement during the playing of the game.
8. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a tool for New Registrations, which enable Participants at individual participant nodes to register their details with the Controller, so as to login and play the game.
9. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes an Add questions to Question Database means, which allows the Controller means to add, edit, modify, alter, delete, add new and or otherwise change the questions for playing the game.
10. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a User Login Means, which allows pre-registered participants at participant nodes to submit their login information including User-id and Password to the Controller means for playing game.
11. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a User Validation means which, validates the Login information supplied by participants in the process of Login.
12. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a Classification Means, which permits the classification of the logged in users into different categories on the basis of information provided by the Participants at the time of Login.
13. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes an Off-time Game Playing Means which, allows a Participant to play the Game in Off-Time mode.
14. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a Select User Means which selects a set of Participants from the Currently Logged in Users to play a segment of the game in accordance with the rules of the game and parameters set by means.
15. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes an Intimation Delivery means which, send a message to the Participants selected to play a segment of the game.
16. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes an advertisement validation and profile validation means and an Advertisement Delivery Means, which validates the profile of a loggedin participant with the parameters set for each advertisement, and delivers an appropriate advertisement to every participant in accordance to the parameters set.
17. Apparatus for playing a quiz game of skill as claimed claim 4, in which the bank of application servers includes a Question Transmission Means, which permits an administrator operating the controller means to transmit a question to all the logged in users and is adapted to permit only the participant selected by Select

Users Means to submit a competitive response to a question in a limited time frame, set in the parameters by Set game Parameters Means and adapted to block the responding mechanism for the non-selected logged in users.

18. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a Timing User Response Means which times the response submitted by every individual selected participant and is adapted to measure the actual time taken by every individual participant for responding and filtering out the delays caused by non-uniform network transmission and/or non-uniform speeds and other characteristics of the Participant Nodes, thus making the participation equitable for all the participants.

19. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes an Encryption of User Response Means which, encrypts the response of each individual selected participant along with the time taken to respond.

20. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a Send Response Means which, allows communication from the selected participant to the Controller to receive a response and process it.

21. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes an update user history Means which updates the response sent by every selected participant in a database.

22. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a Select Winner Means which, selects a winner on the basis of a correct response and quickest time or any other such parameter which may be set.

23. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a display winner means which, allows the Controller to transmit to all the logged in Users, a Display sequence showing the result of a game segment.

24. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of application servers includes a delay filtering means which, measures the time interval between the precise instance at which a question in a game segment is displayed in the display of each participant node and the instance at which the user of the participant node responds.

25. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of database servers includes a Database of all Registered Users, which stores the profile of every individual registered user with fields like User-id, Password, Name, Address, Occupation, Date of Birth, Income Group, Gender and the like and is adapted to be used online or off-line by the administrator operating the Controller for various games or advertisement-related activities.

26. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of database servers includes a questions database adapted to permit random selection of particular questions and in which the questions database are classified, Categorized and/or are arranged in a hierarchy of difficulty levels or other parameters enabling variety to be introduced in an orderly fashion in the course of playing the game.

27. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of database servers includes an advertisement database which contains a plurality of advertisements in a transmissible format flagged with the requisite parameters, the flags including such characteristics of the advertisement as its

category, type, profile of target audience, the duration and frequency for transmission of the Advertisement, the details of the Advertiser and the instance before, during or after the game, in online or off-line mode, when the advertisement is determined to be transmitted.

28. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of database servers includes a database containing information of authorized administrators who are permitted to operated the Controller means and includes security arrangements to prevent unauthorized entry into the game apparatus.

29. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of database servers includes a database that contains the Set Parameters for conducting the game which includes fields like start game time, date, no. of users to be selected per segment of game, no. of game segments, the criteria for selection of participants to respond, the criteria for selection of winner/s the time sequences, game segment intervals, Advertisement Segment intervals, the prize money amounts and distribution and the like.

30. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of database servers includes a database which contains a query related to a particular game segment.

31. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of database servers includes a database which contains the winner details of particular game segment.

32. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of data base servers includes a database which contains the list of Participants selected to respond for the current game segment, a database which contains the list of participant logged in but classified as Spectators, a database which contains a query related to a particular game segment, a database which contains the winner details of particular game segment each of said data bases being actively operated upon during the running and playing of a game and being continuously refreshed and recycled and therefore their contents being of a temporary nature.

33. Apparatus for playing a quiz game of skill as claimed in claim 4, in which the bank of database servers includes a database which contains the statistical data of Registered Participants relating to parameters such as their login behaviour.

34. Apparatus for playing a quiz game of skill as claimed in claims 4, in which the bank of data base servers includes a database which contains the statistical data of Registered Participants, a database which contains the history of all the participants Selected to Respond, a database which contains the winner details for all the games and the segments thereof, a database which contains the details of all questions transmitted during the playing of all games and segment thereof, each o said data bases being of a permanent nature and being generally updated on the completion of a game segment or a game, and being adapted to be periodically emptied or transferred or purged to a records storage means or a database.

35. Apparatus for playing a quiz game of skill playable by remotely located participants simultaneously logged in and competing against each other, said game including inserted advertising including a Controller means comprises a central processing means, connected to a display device, inputting means, data storage means which includes a Cache Memory, Media Player, a navigation and browser means which permits navigation and browsing on an electrical or electronic network connected to the Central processing means via a communicating device.

37. Apparatus for playing a quiz game of skill as claimed in any one of the preceding claims 4 to 48, in which the participant node comprises a central

processing unit, connected to a display device, inputting means, data storage means which includes a Cache Memory, Media Player, a navigation and browser means which permits navigation and browsing on an electrical or electronic network connected to the Central processing means via a communicating device.

39. A method for playing a quiz game of skill playable by remotely located participants simultaneously logged in and competing against each other, and inserting advertising while the game is in progress comprising: i) setting up the apparatus for playing the interactive game comprising the steps of ii) setting up the controller means by connecting the controller means to a bank of application servers and a bank of database servers via an electrical or electronic network, setting the parameters for playing the game or a game segment using the Set Game Parameter Means, storing the parameters set in a database on the database server setting the parameters for displaying the advertisements before, after or between the game or any game segment; storing the parameters set for the advertisements in a database on the database server; selecting the questions to be transmitted for a game or a game segment from a question data bank or a question database on the database server; iii) setting up of Individual participant nodes by connecting the central processing unit of the node into an electrical or electronic network via which they are connected to the bank of Application Servers and the bank of Database Servers; using the means--104 to register the user of the participant node with the controller in order to be allowed to participate in the game to be played; storing the information of each registered user in a database on the database server; logging in of a participant node by use of the login user means to login and letting the controller know of the availability of the participant node for playing the game; validating the information submitted by the user by a user validation means for validation with the information stored in the database; classifying a user participant as a Currently Logged in Participant or a Spectator; storing the classification information in databases; starting the game by using a select User Means to start the game by selecting a certain number of users from the Database according to the parameters set and storing the same in another database being a Currently Selected Users database, using an Intimation delivery means for checking selection in the currently selected user database; transmitting a question using Question transmission means to transmit a question for the game segment which is stored in a database; allowing the selected participant node on receiving a question to respond to the question in a set time; using the Timing User Response Means, for timing the response of every individual selected participant; using the Send Response Means for communicating the response from the selected participant to the Controller by storing it in a database; using the select winner means to select a winner on the basis of a parameter set therefor and writing the information in a temporary database W; and using the display User means to a Display sequence showing the result of a game segment in the display means of each participant node; iv) storing a plurality of advertisements in a Database in the bank of Database Servers in a transmissible format flagged with the requisite parameters; such as its category, type, profile of target audience, the duration and frequency for transmission of the Advertisement, the details of the Advertiser and the instance before, during or after the game, in online or off-line mode, when the advertisement is determined to be transmitted; using Advertisement Validation and Profile Validation Means, to validate the profile of a loggedin participant with the parameters set for each advertisement by the set parameters for advertisement Means in the database against the profiles of individual users available in the database of registered users, and further using the Advertisement Delivery Means to fetch an appropriate advertisement and deliver the same to every participant in accordance with the parameters set by set parameters for advertisement means tool.

40. A method for playing a quiz game of skill playable by remotely located participants simultaneously logged in and competing against each other, and inserting advertising while the game is in progress as claimed in claim 40, in which the database is also updated by this means with statistical information of selection of participants.

42. A method for playing a quiz game of skill playable by remotely located participants simultaneously logged in and competing against each other, and inserting advertising while the game is in progress as claimed in claim 39, which includes the step of all the participants selected or not selected for this game segment using the Question transmission means to fetch and display a transmitted question from the database for a game segment.

43. A method for playing a quiz game of skill playable by remotely located participants simultaneously logged in and competing against each other, and inserting advertising while the game is in progress as claimed in claim 39, in which the Question transmission means is used by the controller means to store a question transmitted in a permanent database permanent storage of all questions transmitted.

45. A method for playing a quiz game of skill playable by remotely located participants simultaneously logged in and competing against each other, and inserting advertising while the game is in progress as claimed in claim 39, which includes using a Timing User response means to check in the currently selected users database and selectively permit only the participants in this database to submit a valid response by creating a response mechanism for the participants in this database and disabling this mechanism for participants not in this database.

47. A method for playing a quiz game of skill playable by remotely located participants simultaneously logged in and competing against each other, and inserting advertising while the game is in progress as claimed 39, in which the Update User History Means is used to the updates the response sent by every selected participant in to a database.

48. A method for playing a quiz game of skill playable by remotely located participants simultaneously logged in and competing against each other, and inserting advertising while the game is in progress as claimed in claim 39, in which the controller means uses an updating means to update a database with the information of the winners for a permanent record of winners.